REMARKS

Applicants appreciatively acknowledge the Examiner's withdrawal of the pending enablement rejection in view of the remarks submitted in their November 14, 2001, communication.

Claims 1-5, 7-19, and 24-38 are currently pending and under examination. Herein, Applicants have amended claims 24, 26, and 35 in order to further define one embodiment of the present invention and to further their business interests and the prosecution of the present application in a manner consistent with the PTO's Patent Business Goals (PBG)[1], and not in acquiescence to the Examiner's arguments and while reserving the right to prosecute the original (or similar) claims in the future. The amendments to claims 24, 26, and 35 made herein find more than ample support in the specification and the claims as originally filed. Applicants have canceled, without prejudice, claim 36 for similar reasons.

None of the claim amendments made herein are related to the statutory requirements of patentability. None of the claim amendments made herein are intended to narrow the scope of any of the amended claims within the meaning of *Festo*[2] or related cases.

The following rejections are at issue, and are set forth by number in the order that they presented and are herein addressed:

1. Claims 35, 37, and 38 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by EP 0779033 to Lievense et al.; and
2. Claims 1-5, 7-19, and 24-38 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious under U.S. 5,760,082 to Cook et al., U.S. 6,159,525 to Lievense et al. in view of WO 97/18320 to Cain et al.

Applicants believe that the present amendments and the following remarks traverse all of the Examiner's remaining rejections.

1. The Pending Claims Are Not Anticipated By EP 0779033

The Examiner maintains that claims 35, 37, and 38 are anticipated by reference EP 0779033 to Lievense et al. for reasons previously made of record. (Final Office Action, *pp.* 2-3). The Examiner argued in the August 14, 2001, Office Action that "Lievense teach a

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[1] 65 Fed. Reg. 54603 (September 8, 2000).

[2] *Festo Corp. v. Shokestu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000).

composition comprising CLA moiety which does not affect the smell or taste of the composition. The CLA moiety may be a mixture of free CLA and CLA triglyceride." The Applicants again respectfully disagree with the Examiner's rejection because under cases such as *Verdegaal Brothers* the Lievense reference clearly does not teach every element of the pending claims.[3]

Nonetheless, Applicants respectfully submit that this rejection is moot in view of the Applicants' rewriting independent claim 35 to incorporate the term "wherein said conjugated linoleic acid moiety is an alkyl ester" from non-rejected pending claim 36. In view of the amendment made to claim 35, claim 36 has been canceled. Thus amended, Applicants respectfully submit that pending claims 35, 37, and 38 are not anticipated by the Lievense reference.

2. The Pending Claims Are Not Obvious Under U.S. 5,760,082 and 6,159,525 in view of WO 97/18320

The Examiner maintains that claims 1-5, 7-19, and 24-38 are obvious under the combination of U.S. 5,760,082 to Cook et al. and 6,159,525 to Lievense et al. in view of WO 97/18320 to Cain et al. This rejection is moot as to canceled claim 36.

A *prima facie* case of obviousness requires the Examiner to provide a reference(s) which (a) discloses all of the elements of the claimed invention, (b) suggests or motivates one skilled in the art to combine the claimed elements to produce the claimed combination, and (c) provides a reasonable expectation of success should the claimed combination be carried out. Failure to establish any one of the these three requirements precludes a finding of a *prima facie* case of obviousness and without more entitles the Applicants to allowance of the claims in issue.[4] In addressing this rejection, Applicants focus on the independent claims since the non-obviousness of independent claims necessarily leads to the non-obviousness of claims dependent thereon.[5]

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[3] In *Verdegaal Bros.* the Federal Circuit stated that "[a] claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference." (*Verdegaal Bros. v. Union Oil Co. Of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

[4] *See, e.g., Northern Telecom Inc. v. Datapoint Corp.*, 15 USPQ2d 1321, 1323 (Fed. Cir. 1990).

[5] §MPEP 2143.03.

A. The References Do Not Teach Every Element Of The Pending Claims

Applicants respectfully submit that the references cited by the Examiner do not teach every element of the claims. The Examiner has admitted that "[t]he primary references do not teach expressly the employment of ascorbic acid or particularly point out the amount of VOC." (August 14, 2001, Office Action, *p.* 4). Applicants note that the references are silent with respect to the VOC content of their compositions. Thus none of the references teach compositions (e.g., food products) with very low VOC content as are presently being claimed.

As described previously, polyunsaturated fatty acids generally undergo peroxidation reactions. In contrast to normal polyunsaturated fatty acids, CLA undergoes oxidation to form volatile breakdown products. In fact, the specification teaches that CLA does not form ordorless and tasteless peroxide breakdown products as do non-conjugated fatty acids; CLA is instead oxidized to form volatile organic compounds such as hexane. (*See e.g.*, Specification, *p.* 23, *ll.* 6-15). The CLA compositions described for instance by Lievense et al. have levels of volatile organic compounds sufficient to affect the taste and smell of the compositions since Lievense et al. state that they obtained CLA from a commercially available mixture of free fatty acids using a prior art non-aqueous alkali isomerization method. (6,159,525 *col.* 5, *ll.* 38-58). Indeed, the cited references, including Cain, fail to appreciate the CLA oxidation problem and thus offer no guidance for solving it.

Applicants however, suggested in their specification that the CLA oxidation problem is likely caused by metal ion contamination in the starting material. Applicants solved this problem by using a combination of methods, including, but not limited to addition of metal oxidant chelators and the removal of pro-oxidants by methods such as distillation and treatment with adsorbing agents. (Specification, *p.* 24, *ll.* 20-25). As demonstrated in the specification, the methods invented by the Applicants' were **necessary** to prevent the oxidation of CLA into the typical CLA oxidant compounds that affect the smell and taste compositions (*e.g.*, food stuffs) containing CLA. It is well settled in patent law that "[i]t should not be necessary . . . to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified." (*In re Sponnable*, 405 F.2d 578, 585 (C.C.P.A. 1969); *In re Kosei Nomiya et al.*, 509 F.2d 566, 571 (C.C.P.A. 1975)).

As it stands, none of the cited references teach the removal of pro-oxidants by methods such as distillation and treatment with adsorbing agents and none of the cited references teach compositions comprising conjugated linoleic acid moieties that contain less than 100 ppm volatile organic compounds as are presently being recited. The Examiner attempts to overcome this deficiency in the references by stating that "since the prior art teach that the food products containing CLA do not have any sensory property caused by VOC, the amount of VOC is reasonably believed to be very low." (Final Office Action, *p.* 3).

The Applicants must respectfully disagree with both of the Examiner's assertions. First, there is no basis for the examiner's statement that the cited prior art references "teach that the food products containing CLA do not have any sensory property caused by VOC." As stated above, it was the Applicants who solved the problem of CLA oxidation. Second, there is also no basis for the Examiner's statement that "the amount of VOC is reasonably believed to be very low."

As a matter of law the Examiner is **not** "one skilled in the art." (*See, Stratoflex, Inc., v. Aeroquip Corp.*, 218 USPQ 871, 879 [Fed. Cir. 1983]). Consequently, the Examiner's own views regarding the obviousness of the presently claimed compositions cannot enter into the determination of obviousness. Therefore, the Examiner's "reasonable belief" that the amount of VOC is "very low" is not evidence upon which a *prima facie* case of obviousness can be based. The Examiner is again requested to provide such evidence either by citation to a prior art reference or by submitting an affidavit substantiating his qualification to make such a conclusion.

Accordingly, Applicants respectfully submit that the references cited by the Examiner do not teach each element of the Claims and respectfully request that the claims be passed to allowance.

B. The Cited References Do Not Provide A Reasonable Expectation of Success

The cited references do not provide a reasonable expectation of success for obtaining the claimed compositions. The Federal Circuit has held that "obvious to experiment" is not the standard for obviousness. (*In re Dow Chemical*, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988)). The *Dow* court made it very clear that one must determine whether "the prior art would have suggested to one of ordinary skill in the art that this process **should** be carried out and **would**

have a reasonable likelihood of success, viewed in light of the prior art." (*Dow*, at 1531, emphasis added).

As described in detail above, the cited prior art references did not recognize the problem (*i.e.*, metal ions causing the accumulation of volatile organic compounds) solved by the inventors of the present application. Thus, these references cannot provide a reasonable expectation of success in producing the claimed compositions. In particular, the cited references do not recognize or provide methods for removing metal ion contaminants from their compositions. The failure to do so results in the oxidation of CLA into volatile organic compounds such as those specified in the pending claims. The Examiner's unsupported statements about the level of volatile organic compounds in the prior art compositions do not cure the deficiencies in the references. In conclusion, the Applicants submit that one skilled in the art would not believe that a reasonable expectation of success existed for arriving at the claimed invention. Therefore, a *prima facie* case of obviousness has not been established and the claims should be passed to allowance.

CONCLUSION

All grounds of rejection and objection of the Final Office Action of May 13, 2002 having been addressed, reconsideration of the application is respectfully requested. It is respectfully submitted that the invention as claimed fully meets all requirements for patentability and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect at (608) 218-6900.

Dated: October 15, 2002

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Appendix 1

In The Claims:

Please cancel claim 36 without prejudice.

Please amend claims 24, 26, and 35 as follows:

24. (Amended) A food product comprising a conjugated linoleic acid moiety and a metal oxidant chelator, wherein said conjugated linoleic acid moiety contains less than 100 ppm volatile organic compounds.

26. (Twice Amended) The food product of Claim 24, [wherein said conjugated linoleic acid moiety contains less than 100 ppm volatile organic compounds,] wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

35. (Twice Amended) A composition comprising an isomerized conjugated linoleic acid moiety, said conjugated linoleic acid moiety having a sufficiently low volatile organic compound concentration so that the taste and smell of said composition is not affected, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof, further wherein said conjugated linoleic acid moiety is an alkyl ester.

Appendix 2

1. (Amended once) A composition comprising an isomerized conjugated linoleic acid moiety, said composition containing less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

2. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is a free fatty acid.

3. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is an alkyl ester.

4. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is a triacylglyceride.

5. The composition of claim 1, wherein said composition further comprises a metal oxidant chelator.

7. (Amended once) The composition of claim 1, wherein said composition contains less than 50 parts per million total of said volatile organic compounds.

8. (Amended once) The composition of claim 1, wherein said composition contains less than 10 parts per million total of said volatile organic compounds.

9. (Amended once) The composition of claim 1, wherein said composition contains less than 5 parts per million total of said volatile organic compounds.

10. (Amended once) A food product comprising an isomerized conjugated linoleic acid moiety and an metal oxidant chelator, wherein said isomerized conjugated linoleic acid moiety

contains less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

11. The food product of claim 10, wherein said moiety is selected from the group consisting of a triacylglyceride, a free fatty acid, and an alkyl ester.

12. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 50 parts per million total of said volatile organic compounds.

13. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 10 parts per million total of said volatile organic compounds.

14. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 5 parts per million total of said volatile organic compounds.

15. (Amended once) A food supplement comprising a isomerized conjugated linoleic acid moiety and an metal oxidant chelator, wherein said isomerized conjugated linoleic acid moiety contains less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

16. The food supplement of claim 15, wherein said moiety is selected from the group consisting of a triacylglyceride, a free fatty acid, and an alkyl ester.

17. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 50 parts per million total of said volatile organic compounds.

18. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 10 parts per million total of said volatile organic compounds.

19. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 5 parts per million total of said volatile organic compounds.

24. (Amended) A food product comprising a conjugated linoleic acid moiety and a metal oxidant chelator, wherein said conjugated linoleic acid moiety contains less than 100 ppm volatile organic compounds.

25. The food product of Claim 24, wherein said metal oxidant chelator is selected from lecithin and ascorbic acid.

26. (Twice Amended) The food product of Claim 24, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

27. (Amended once) The food product of Claim 24, wherein said conjugated linoleic acid moiety contains less than 5 ppm of said volatile organic compounds.

28. The food product of Claim 24, wherein said conjugated linoleic acid moiety is an ester of conjugated linoleic acid.

29. The food product of Claim 24, wherein said conjugated linoleic acid moiety is a triglyceride containing conjugated linoleic acid.

30. The food product of Claim 24, wherein said conjugated linoleic acid moiety is a free fatty acid.

31. (Amended once) A food product comprising an isomerized conjugated linoleic acid moiety, said conjugated linoleic acid moiety having a sufficiently low volatile organic compound concentration so that the taste and smell of said food product is not affected, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

32. The food product of Claim 31, wherein said conjugated linoleic acid moiety is an alkyl ester.

33. The food product of Claim 31, wherein said conjugated linoleic acid moiety is a free fatty acid.

34. The food product of Claim 31, wherein said conjugated linoleic acid moiety is a triglyceride.

35. (Twice Amended) A composition comprising an isomerized conjugated linoleic acid moiety, said conjugated linoleic acid moiety having a sufficiently low volatile organic compound concentration so that the taste and smell of said composition is not affected, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof, further wherein said conjugated linoleic acid moiety is an alkyl ester.

37. The composition of Claim 35, wherein said conjugated linoleic acid moiety is a free fatty acid.

38. The composition of Claim 35, wherein said conjugated linoleic acid moiety is a triglyceride.